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The rising costs of health care are placing a number of strains on the Medicare program and on the income security of its largest group of beneficiaries: the elderly.

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The Medicare Program and Its Role in the U.S. Health Care System

- In 1990, Medicare accounted for 16 percent of total national health expenditures. Medicare expenditures are estimated to have represented 2.0 percent of GNP in 1990 and are projected to increase to 6.8 percent of GNP in the year 2060.
- The number of people eligible for Medicare will increase dramatically in the coming decades. In 1989, the percentage of Americans aged 65 and over was 12.5 percent, and this percentage is projected to rise to 22 percent by the year 2030.
- Of all health insurers, Medicare is the single largest purchaser of hospital and physician care, purchasing approximately 40 percent of hospital care and 20 percent of physician care in 1989.
- Medicare program Part A expenditures for coverage of hospital care are increasingly exceeding income, leading to a projected insolvency by the year 2006.
- Medicare's prospective payment system (PPS) has reduced Medicare Part A costs by reducing admissions and lengths of stay for Medicare patients, although it may have increased the growth rate of Part B costs.
- Growing concern about increases in physician service expenditures, exacerbated by the shift from inpatient to outpatient care caused by the introduction of PPS in Medicare Part A, resulted in a provision of OBRA '89 that changed Medicare's methodology for reimbursing physicians.
- The majority of Medicare beneficiaries do not rely solely on Medicare for health insurance coverage. They can purchase supplemental Medigap insurance, rely on employer-sponsored health plans, or—for the poorest elderly—gain Medicaid coverage.

◆ Introduction

In 1990, Medicare, the federal health insurance program for the elderly and severely disabled, accounted for 16 percent of total national health expenditures. Medicare expenditures are estimated to have represented 2.0 percent of Gross National Product (GNP) in 1990 and are projected to increase to 6.8 percent of GNP in the year 2060 (U.S. Department of Health and Human Services, 1991a). **Total Medicare expenditures grew from $6.2 billion in 1970 to $98.1 billion in 1990. Medicare outlays accounted for 7.8 percent of total federal budget outlays in 1990.**

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The number of people eligible for Medicare will increase dramatically in the coming decades. The proportion of Americans aged 65 and older was 12.5 percent in 1989 and is projected to rise to 22 percent by the year 2030.

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During this period, private spending by the elderly also increased. Although the elderly represented 12 percent of the U.S. population in 1987, they accounted for 36 percent of personal health care expenditures (U.S. Congress, 1989). Between 1977 and 1984, the elderly's total personal health care expenditures more than doubled, increasing from $43 billion to $119 billion (Piacentini and Cerino, 1990). The elderly's total personal health care expenditures reached $175 billion in 1988, an increase of 46 percent since 1984 (table 1). The percentage of the elderly's health care spending from private sources increased from 36 percent of total personal health spending in 1977 to 42 percent in 1988. Medicare's share of the elderly's personal spending decreased from 44 percent to 40 percent during this same period.

The number of people eligible for Medicare will increase dramatically in the coming decades. The proportion of Americans aged 65 and older was 12.5 percent in 1989 and is projected to rise to 22 percent by the year 2030. Furthermore, the elderly population itself is getting older. Although most of the 31 million elderly persons in 1989 were aged 65–74 (58.7 percent), more than 30 percent of them were aged 75–84, and nearly 10 percent were aged 85 and over. By the year 2050, persons aged 85 and over are projected to account for nearly 25 percent of the elderly population—about 5 percent of the total population (Soldo and Agree, 1988).

The changing demographic composition of the U.S. population is already affecting Medicare expenditures. The total amount reimbursed on behalf of elderly enrollees under Medicare (Part A and Part B combined) reached $67 billion in 1987, up from $4 billion in 1967—an annual average increase of 14.5 percent (table 2). The amount reimbursed per enrollee increased from $217 to $2,440 during the same period. The growth rate of Medicare reimbursements per enrollee outpaced general medical inflation, which rose at an average annual rate of 8 percent per year between 1967 and 1987 (table 2).

The Omnibus Budget Reconciliation Act of 1990 (OBRA '90) included a provision calling for expenditure reductions of $34 billion in the Medicare budget over the next 5 years. These reductions are intended to cut the growth rate in Medicare expenditures rather than produce an actual reduction in expenditures. Under current law, program expenditures for Medicare Part A coverage for hospital care are increasingly exceeding program income, leading to a projected insolvency by the year 2006 (U.S. Department of Health and Human Services, 1991a).

Of all health insurers, Medicare is the largest single purchaser of hospital and physician care, purchasing approximately 40 percent of hospital care and 20 percent of physician care in 1989. Changes in the ways Medicare reimburses hospitals and physicians can

Table 1
Personal Health Care Expenditures for People Aged 65 and Over, by Source of Funds and Type of Service, 1988, 1984, and 1977 (in millions)

Source of Funds	Total Care	Type of Service			
		Hospital	Physician	Nursing Home	Other Care
1988					
Total	$175,460	$72,457	$37,957	$36,545	$28,501
Private	73,894	12,401	18,931	21,207	21,354
Consumer	73,077	12,054	18,919	20,911	21,192
out-of-pocket	51,599	2,999	8,765	20,445	19,390
insurance	14,142	7,560	4,539	467	1,576
Medicare premium[a]	7,336	1,496	5,615	0	225
Other private	818	347	12	296	163
Government	101,566	60,056	19,025	15,338	7,146
Medicare	70,304	48,889	17,711	615	3,089
Medicaid	20,651	3,510	548	13,082	3,510
Other government	10,610	7,657	766	1,641	547
Elderly Population (in millions)	30.4				
1984					
Total	$119,872	$54,200	$24,770	$25,105	$15,798
Private	39,341	6,160	9,827	13,038	10,316
Consumer	38,875	5,964	9,818	12,856	10,237
out-of-pocket	30,198	1,694	6,468	12,569	9,467
insurance	8,677	4,270	3,350	287	770
Other private	466	196	9	182	79
Government	80,531	48,040	14,943	12,067	5,482
Medicare	58,519	40,524	14,314	539	3,142
Medicaid	15,288	2,595	467	10,418	1,808
Other government	6,724	4,920	162	1,110	532
Elderly Population (in millions)	28.5				
1977					
Total	$43,425	$18,906	$7,782	$10,696	$6,041
Private	15,669	2,319	3,323	5,424	4,603
Consumer	15,499	2,263	3,320	5,352	4,564
out-of-pocket	12,706	927	2,147	5,264	4,368
insurance	2,793	1,336	1,173	88	195
Other private	170	56	3	72	39
Government	27,756	16,587	4,458	5,272	1,438
Medicare	19,171	14,087	4,158	348	578
Medicaid	6,049	733	232	4,453	631
Other government	2,536	1,767	68	470	230
Elderly Population (in millions)	24.3				

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, *Health Care Financing Review* (Fall 1984): 10, and unpublished data.
[a]Data not available for 1984 and 1977.

have important implications for the delivery and costs of health care services to other patients.

This *Issue Brief* provides an overview of Medicare's organizational structure, including its sources of funds and the health care services it covers. In addition, the report examines supplemental sources of health insurance coverage for Medicare beneficiaries and the effect of this coverage on program and beneficiary costs. In the conclusion, this *Issue Brief* provides some observa-

Table 2

Hospital Insurance and Supplementary Medical Insurance: Amount Reimbursed to Medicare Beneficiaries, by Type of Coverage and Service, 1967–1988,[a] Selected Years

Type of Coverage and Service	1967	1975	1980	1984	1985	1986	1987	1988	Average Annual Rate Change (percentage) 1967–88
Hospital Insurance and/or Supplementary Medical Insurance	amount reimbursed (in millions)								
	$4,239	$12,689	$29,134	$49,452	$56,199	$60,459	$67,022	$72,900	14.5%
Hospital insurance	2,967	9,209	20,353	33,418	37,360	39,285	41,744	45,703	13.9
inpatient hospital	2,659	8,840	19,583	31,428	35,313	37,181	39,578	43,112	14.2
skilled nursing services	274	233	331	458	464	474	524	811	5.3
home health services[b]	26	136	440	1,532	1,583	1,630	1,643	1,781	22.3
Supplementary medical insurance	1,272	3,481	8,781	16,034	18,839	21,174	25,278	27,196	15.7
physicians' and other medical services	1,224	3,050	7,361	13,218	15,309	16,887	20,143	21,311	14.6
outpatient services	38	374	1,261	2,790	3,499	4,249	5,087	5,843	27.1
home health services[b]	17	56	159	26	31	38	38	43	4.5
Hospital Insurance and/or Supplementary Medical Insurance	amount reimbursed per person served								
	$597	$1,055	$1,791	$2,616	$2,762	$2,870	$3,025	$3,178	8.3%
Hospital insurance	749	1,855	3,379	5,144	6,167	6,528	6,903	7,515	11.6
inpatient hospital	738	1,799	3,291	5,073	6,181	6,526	6,881	7,461	11.6
skilled nursing services	774	896	1,336	1,580	1,525	1,613	1,853	2,184	5.1
home health services[b]	204	413	652	1,096	1,093	1,110	1,135	1,199	8.8
Supplementary medical insurance	195	296	545	857	933	1,012	1,148	1,192	9.0
physicians' and other medical services	191	268	471	729	781	831	937	957	8.0
outpatient services	25	99	190	319	354	385	427	457	14.8
home health services[b]	145	347	526	1,068	1,122	1,264	1,233	1,359	11.2
Hospital Insurance and/or Supplementary Medical Insurance	amount reimbursed per enrollee								
	$217	$557	$1,142	$1,794	$1,995	$2,100	$2,281	$2,440	12.2%
Hospital insurance	152	410	811	1,233	1,350	1,390	1,448	1,559	11.7
inpatient hospital	137	394	780	1,159	1,276	1,316	1,373	1,471	12.0
skilled nursing services	14	11	13	17	17	17	18	28	3.4
home health services[b]	1	6	18	56	57	58	57	61	21.6
Supplementary medical insurance	71	159	356	599	690	760	891	945	13.1
physicians' and other medical services	69	139	298	494	561	606	710	740	12.0
outpatient services	2	17	51	104	128	153	180	203	24.6
home health services[b]	1	2	6	1	1	1	1	1	0.0

Source: U.S. Department of Health and Human Services, Social Security Administration, *Social Security Bulletin Annual Statistical Supplement 1990* (Washington, DC: U.S. Government Printing Office, 1991).

[a]Data for persons enrolled are as of July 1; for persons served and amount reimbursed, data are for calendar year.

[b]The Omnibus Reconciliation Act of 1980 (P.L. 96-499) eliminated the 100-visit limit on home health services and the three-day prior hospitalization requirement. This made the coverage of home health services under hospital insurance (HI) the same as under supplementary medical insurance (SMI). Because section 1833(d) of the Social Security Act requires that services that can be paid under HI cannot be paid under SMI, virtually all home health services are now paid under the HI program.

tions on the program's future and its impact on the U.S. health care delivery system.

◆ Overview of the Medicare Program

The Medicare program consists of two parts. Part A, Medicare Hospital Insurance (HI), pays for acute health care expenditures (primarily hospital care and skilled nursing care). Part A is also an entitlement program for Social Security recipients aged 65 and over, persons receiving Social Security disability benefits for at least two years, and certain persons with chronic kidney disease.[1] Part B, Medicare Supplemental Medical Insurance (SMI), provides insurance coverage for physician services and outpatient medical care as well as some hospital services not paid by Medicare Part A. Participation in SMI is voluntary. The Medicare program is under the jurisdiction of the U.S. Department of Health and Human Services (HHS) and is administered by the Health Care Financing Administration (HCFA).

HI Program

Persons aged 65 and over who are fully insured[2] (based on their own or their spouse's work record) to receive Social Security or Railroad Retirement benefits (even though they may continue to be employed) are eligible for Part A coverage. Elderly persons who do not meet these criteria may still receive HI coverage by paying a monthly premium ($177 in 1991) in addition to Part B premiums and the annual deductible.

[1]Persons who are medically determined to suffer from end-stage renal disease are eligible for Medicare coverage if they are fully insured for Old Age and Survivor's Insurance, entitled to receive monthly Social Security benefits, or are spouses or dependents of persons meeting the foregoing criteria.

[2]*Fully insured* status means that a retired or disabled worker, as well as his or her dependents or survivors, are eligible to receive benefits. Workers become *fully insured* if they earn one quarter of coverage for every year (or every four quarters) after 1950 or in the year in which they reach age 21 (whichever is later) and, prior to the time they reach age 62, become disabled or die.

Medicare Part A provides benefits for inpatient hospital care, skilled nursing care, home health care, and hospice care. Under the HI program, beneficiaries are subject to a deductible for each hospital admission, called the inpatient hospital deductible (IHD). The amount of the deductible ($628 in 1991) is generally indexed to the average cost of hospital days. If the hospital stay exceeds 60 days, the beneficiary is also subject to a copayment, equal to one-quarter of the IHD ($157 in 1991) per day for the 61st through the 90th days. If the hospital stay lasts 91–150 days, the beneficiary has the option of paying the hospital charges incurred during those days or paying a copayment equal to one-half of the IHD ($314 in 1991) per day (drawing from a 60-day lifetime reserve) (table 3). HI provides no coverage after 150 days.

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If a Medicare beneficiary is released from a hospital to a skilled nursing facility (SNF), Part A will cover expenses incurred during the first 100 days. Medicare agrees to pay all expenses for the first 20 days; beneficiaries are required to contribute a set amount per day for the remaining 80 days of coverage ($78.50 in 1991)(table 3).

Beneficiaries are entitled to receive an unlimited number of home visits by therapists, nurses, and physicians, if these services are ordered by a physician. Part A also covers medical supplies and some rehabilitation equipment. Unlike coverage for a SNF, Medicare beneficiaries are not required to be hospitalized before receiving this coverage.

Table 3
Medicare Premiums: HI Cost Sharing and Premium Amounts, 1966–1991

Year	Inpatient Hospital Deductible (IHD) for Days 1–60	(Inpatient Hospital Daily Coinsurance)[a] 61st–90th Day (1/4 x IHD)	(Inpatient Hospital Daily Coinsurance)[a] Lifetime Reserve Days after 90 Days (1/2 x IHD)	Skilled Nursing Facility (SNF) Daily Coinsurance after 20 Days (1/8 x IHD)	Monthly Premium[b]
	(beginning in January unless otherwise noted)				(July)
1966 (July)	$ 40	$ 10	c	c	—
1967	40	10	c	$ 5.00	—
1968	40	10	$ 20	5.00	—
1969	44	11	22	5.50	—
1970	52	13	26	6.50	—
1971	60	15	30	7.50	—
1972	68	17	34	8.50	—
1973	72	18	36	9.00	$ 33
1974	84	21	42	10.50	36
1975	92	23	46	11.50	40
1976	104	26	52	13.00	45
1977	124	31	62	15.50	54
1978	144	36	72	18.00	63
1979	160	40	80	20.00	69
1980	180	45	90	22.50	78
1981	204	51	102	25.50	89
1982	260	65	130	32.50	113
1983	304	76	152	38.00	113
1984	356	89	178	44.50	155
1985	400	100	200	50.00	174
1986	492	123	246	61.50	214
1987	520	130	260	65.00	226
1988	540	135	270	67.50	234
1989	560[d]	d	d	25.50[e]	156
1990	592	148	296	74.00	175
1991	628	157	314	78.50	177

Source: U.S. Department of Health and Human Services, Social Security Administration, *Social Security Bulletin Annual Statistical Supplement 1990* (Washington, DC: U.S. Government Printing Office, 1991).
[a]All expenses in "benefit period" are covered except for those listed.
[b]Voluntary participation of individuals aged 65 or over not otherwise entitled to hospital insurance.
[c]Benefit not provided.
[d]For 1989, once the annual deductible had been paid by the beneficiary, Medicare paid the balance of expenses for covered hospital services regardless of the number of days of hospitalization.
[e]For 1989, the beneficiary paid a coinsurance amount for the first eight days of care. The coinsurance amount was equal to 20 percent of the estimated national average daily cost of covered SNF care.

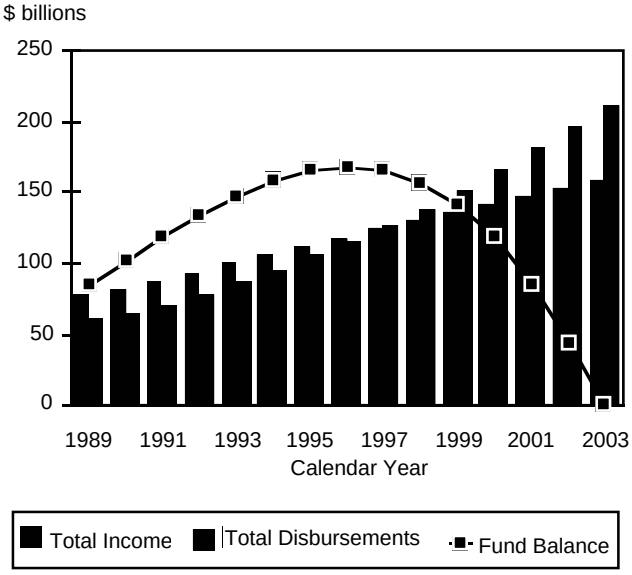
Terminally ill Medicare beneficiaries with a life expectancy of six months or less are eligible for Medicare coverage of hospice care for a maximum of 210 days. When beneficiaries choose to be covered by hospice care, they forfeit all other Medicare coverage except for physician services and treatment of conditions unrelated to the terminal illness. The terminally ill beneficiary is required to pay 5 percent of prescription drug costs (not to exceed $5 per prescription) and 5 percent of respite care costs (not to exceed 5 consecutive days and not to exceed $628 for the entire hospice stay).

Medicare Part A provides limited coverage for extended inpatient hospital care and care received in a skilled

nursing facility. Long-term care, nursing home care, and home health care that is determined to be unrelated to rehabilitation or is purely custodial are not covered. In addition, Medicare Part A does not cover prescription drugs.

Social Security payroll taxes are the major funding source for Medicare Part A. Workers, employers, and the self-employed contribute 2.9 percent of wages and earnings[3] up to the annual maximum taxable wage base ($125,000 in 1991). Medicare Part A is financed on a current cost basis—current workers finance the benefits of current beneficiaries. The 1990 report of the HI board of trustees estimated that HI payroll taxes paid by employers and employees would have to rise from the current 2.9 percent of payroll to more than 4 percent by the year 2010 and to more than 7 percent of payroll by the year 2030 if the trust fund is to remain solvent (U.S. Department of Health and Human Services, 1990a). The 1990 HI trustees' report, which was released prior to the passage of OBRA '90, also indicated that the trust fund would be insolvent by the year 2003 (chart 1). Changes in Medicare required by OBRA '90, including raising the taxable wage base to $125,000 and reducing expenditure growth over the next several years, have delayed the projected year of insolvency.

Chart 1
Projected Ratio of Total Income to Total Disbursements in the HI Trust Fund, Based on the II-B Intermediate Set of Assumptions,[a] 1989[b]–2003



Source: U.S. Department of Health and Human Services, Health Care Financing Administration, *1990 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund* (Washington, DC: Health Care Financing Administration, 1990).

[a]The trustees of the HI trust fund make projections concerning the trust fund using four alternative measures that are based on different sets of assumptions of economic and demographic conditions: the optimistic assumptions (I), the intermediate assumptions (II-A and the II-B), and the pessimistic assumptions (III). The II-B assumptions are most commonly used and are used in this discussion.

[b]Figures for 1989 represent actual experience.

PPS—Prior to the 1983 Social Security Amendments, Medicare paid hospitals retrospectively on a reasonable cost basis. That is, a hospital's reimbursement rate was determined by its historic costs. **On October 1, 1983, Medicare began a three-year phase-in of the prospective payment system (PPS), which reimburses hospitals per admission at a prospectively determined rate. Under this system, each admission is assigned to one of 477 diagnosis-related groups (DRGs).** These DRGs group together admissions that require a similar set of resources. The amount of resources needed to provide care to patients within each DRG is compared with the amount of resources needed to treat a patient in a reference DRG. Thus, an index is created that indicates the amount of resources needed to treat a patient within a DRG relative to the reference group. DRG payments are calculated by multiplying a standardized payment rate by this index and adjusting for various circumstances.

Other factors that partially determine DRG payment include urban and rural cost differentials, area wage rates, sole community hospitals, teaching hospitals, and

[3]Employers and employees each contribute 1.45 percent of payroll. Self-employed workers contribute at the same rate as other workers, but they are also required to contribute the matching employer share.

disproportionate share hospitals[4] (U.S. Department of Health and Human Services, 1990b). Urban hospitals accounted for 77 percent of all PPS discharges and 53 percent of PPS hospitals but received 85 percent of total PPS payments. On the other hand, rural hospitals, which accounted for 23 percent of PPS discharges and 43 percent of PPS hospitals, received only 15 percent of all PPS payments (U.S. Department of Health and Human Services, 1990b).

PPS represents a fundamentally different method for reimbursing hospitals than was commonly used by either public or private payers in the past. It changed hospitals' incentives to restrain costs in two ways.

First, the change from a reimbursement rate based on an individual hospital's historic costs to a prospectively determined rate meant that hospitals could no longer influence future reimbursement rates by incurring higher current costs. PPS thus removed one disincentive for hospitals to restrain their costs. An exception was that payments for hospital capital costs are paid as a "pass through" under PPS.[5] That is, Medicare reimburses the hospital based on the hospital's capital costs and percentage of its patients who are Medicare beneficiaries. HCFA has proposed folding capital payments into the DRG rate, with a 10-year transition period.

The second way in which PPS changed hospital incentives concerns the bundling of services provided a patient during a single admission. Historically, cost-based, per diem reimbursement gave hospitals a financial incentive to lengthen the Medicare patients' stays and provide more services per stay. **Conversely, under PPS, hospitals have an incentive to reduce the length of stay and provide the minimum services necessary for patient care. Hospitals lose money when their services cost more than the Medicare reimbursement for that admission.** There has been some concern that hospitals would decrease the quality of care they provide to Medicare patients and increase the number of admissions in response to PPS.

A number of studies have found that PPS has reduced the average length of stay per admission and number of admissions. A recent study indicates that PPS may have reduced the average number of inpatient hospital days (Schwartz and Mendelson, 1991). Between 1981 and 1988, the cumulative reduction was 28.1 percent.[6] The study also found that PPS reduced the number of inpatient admissions. Between 1981 and 1988, the cumulative percentage decrease was 23.6 percent.[7] Other studies indicate that there has been no concurrent reduction in the quality of care provided to Medicare patients (Kahn et al., 1990).

To avoid undue disruption in the delivery of inpatient services, the legislation creating PPS stipulated that the transition to this new reimbursement method be budget neutral. However, the incentives PPS provided hospitals during the phase-in period enabled many of them to reap increased profits from Medicare patients. As a result, these hospitals were able to use the proceeds from Medicare patients to subsidize other patients (Custer, 1989). However, since the completion of the

[4]Adjustments are based on several factors. Medicare makes additional payments to hospitals that incur additional costs resulting from the expense of medical education (*indirect medical education costs*). Medicare also provides additional payments to hospitals providing medical services to a disproportionately large number of low-income patients (*disproportionate share hospitals*). In addition, Medicare makes funds available for the direct medical costs of training nurses and allied health professionals (*direct medical costs*).

[5]A second important exception was for psychiatric care provided in psychiatric hospitals or units of hospitals. It was felt that DRGs could not be standardized enough to base reimbursement for these admissions. This decision had important consequences for the supply of psychiatric beds (see Custer, 1990).

[6]The actual reduction in the number of inpatient hospital days was 18.6 percent. The cumulative reduction in the average number of inpatient hospital days refers to the difference between current levels and the levels that would have occurred without PPS.

[7]The actual number of inpatient hospital admissions was reduced by 13.4 percent. The cumulative reduction in the average number of inpatient hospital days refers to the difference between current levels and the levels that would have occurred without PPS.

phase-in period, increases in PPS payment rates to hospitals have not kept pace with costs. As a result, it seems likely that at least in some cases other patients are subsidizing Medicare patients.

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Participation in the Medicare Part B program is voluntary. Elderly persons obtain Part B coverage by paying a monthly premium that is usually deducted from Social Security benefits.

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The prospective payment system has slowed Medicare Part A cost increases by reducing admissions and lengths of stay for Medicare patients (U.S. Department of Health and Human Services, 1990b). Other factors, including greater access to home health care, improved technology, and more stringent third party utilization review, may also have contributed to decreases in the average length of hospital stay (Lohr, 1990). The incentives PPS introduced led hospitals to change the way they interacted with their medical staffs. As a result, physicians have adopted practice styles that have shifted care out of the hospital into the outpatient sector. Hospital services accounted for a smaller share of personal health care spending for the elderly in 1988 than in 1977 (table 4). Physician services, on the other hand, showed a proportional increase. While PPS reduced the rate of increase in Medicare Part A costs, it may have increased the growth rate of Part B costs.

SMI Program

Participation in the Medicare Part B program is voluntary. Elderly persons obtain Part B coverage by paying a monthly premium that is usually deducted from Social Security benefits. The SMI standard monthly premium rate grew from $3 in 1966 to $29.90 in 1991 and is scheduled to rise gradually to $46.10 by 1995. In addition to monthly premiums, enrollees in the SMI program are subject to an annual deductible of $100 and a 20 percent copayment on all covered expenses (table 5). The Medicare program encourages eligible persons to participate by charging those who delay enrolling a 10 percent higher premium for each year in which they fail to enroll.

Medicare Part B finances 80 percent of the cost for most outpatient services. It covers physician services, including home, office, and hospital visits; outpatient services received in hospitals, rural health, community health, and renal dialysis centers; and physical and occupational therapy services. Medicare Part B does not cover dental care, eye care, or a number of other outpatient services.

Twenty-five percent of Medicare Part B is financed by voluntary contributions (monthly premiums) made by persons aged 65 and over and those with long-term disabilities or chronic kidney disease. The remaining 75 percent is financed through general revenues in the federal budget. Therefore, unlike the HI trust fund, the SMI trust fund is not at risk of being depleted. However, increases in Part B expenses directly affect the federal budget deficit.

Medicare currently pays physicians for each service they provide based on the "customary, prevailing, and reasonable" (CPR) charge for that service. The reasonable charge is the lowest of the following charges: physician's customary charge, regional prevailing charge, or actual billed charge. Medicare then pays 80 percent of the reasonable charge (assuming that the beneficiary has already paid the annual deductible), leaving the beneficiary responsible for the remaining 20 percent coinsurance. If the physician does not agree to accept Medicare reimbursement as full payment (that is, the physician does not accept the Medicare assignment), the beneficiary is also responsible for any difference between the reasonable charge and the physician's billed charge. An increase in the billed charge raises a physician's customary charge in the

following year and is factored into the schedule of regional prevailing charges.

RBRVS—Growing concern about increases in physician service expenditures, exacerbated by the shift from inpatient to outpatient care caused by the introduction of PPS in Medicare Part A, resulted in a provision of the Omnibus Budget Reconciliation Act of 1989 (OBRA '89) that changes Medicare's methodology for reimbursing physicians. **In 1992, Medicare is sched-**

Table 4
Percentage Distribution of Personal Health Care Expenditures for People Aged 65 and Over, by Source of Funds and Type of Service, 1988, 1984, and 1977

Source of Funds	Total	Type of Service			
		Hospital	Physician	Nursing Home	Other Care
			1988		
Total per Capita	100.0%	41.3%	21.6%	20.8%	16.2%
Private	100.0	16.8	25.6	28.7	28.9
Consumer	100.0	16.5	25.9	28.6	29.0
out-of-pocket	100.0	5.8	17.0	39.6	37.6
insurance	100.0	53.5	32.1	3.3	11.1
Medicare premium	100.0	20.4	76.5	0.0	3.1
Other private	100.0	42.4	1.5	36.2	19.9
Government	100.0	59.1	18.7	15.1	7.0
Medicare	100.0	69.5	25.2	0.9	4.4
Medicaid	100.0	17.0	2.7	63.3	17.0
Other government	100.0	72.2	7.2	15.5	5.2
			1984		
Total per Capita	100.0%	45.2%	20.7%	20.9%	13.2%
Private	100.0	15.7	25.0	33.1	26.2
Consumer	100.0	15.3	25.3	33.1	26.3
out-of-pocket	100.0	5.6	21.4	41.6	31.3
insurance	100.0	49.2	38.6	3.3	8.9
Other private	100.0	42.1	1.9	39.1	17.0
Government	100.0	59.7	18.6	15.0	6.8
Medicare	100.0	69.2	24.5	0.9	5.4
Medicaid	100.0	17.0	3.1	68.1	11.8
Other government	100.0	73.2	2.4	16.5	7.9
			1977		
Total per Capita	100.0%	43.5%	17.9%	24.6%	13.9%
Private	100.0	14.8	21.2	34.6	29.4
Consumer	100.0	14.6	21.4	34.5	29.4
out-of-pocket	100.0	7.3	16.9	41.4	34.4
insurance	100.0	47.9	42.0	3.1	7.0
Other Private	100.0	32.7	1.9	42.5	22.9
Government	100.0	59.8	16.1	19.0	5.2
Medicare	100.0	73.5	21.7	1.8	3.0
Medicaid	100.0	12.1	3.8	73.6	10.4
Other government	100.0	69.7	2.7	18.6	9.1

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, *Health Care Financing Review* (Fall 1984):16, and unpublished data.

Table 5
Medicare Premiums: SMI Cost Sharing and Premium Amounts, 1966–1991

			Monthly Premium		
				Government Amounts for	
	Annual Deductible	Coinsurance	For Enrollees	Elderly	Disabled[a]
July					
1966	$ 50	20%	$ 3.00	$ 3.00	—
1967	50	20	3.00	3.00	—
1968	50	20	4.00	4.00	—
1969	50	20	4.00	4.00	—
1970	50	20	5.30	5.30	—
1971	50	20	5.60	5.60	—
1972	50	20	5.80	5.80	—
1973	60	20[b]	6.30	6.30	$22.70
1974	60	20	6.70	6.70	29.30
1975	60	20	6.70	8.30	30.30
1976	60	20	7.20	14.20	30.80
1977	60	20	7.70	16.90	42.30
1978	60	20	8.20	18.60	41.80
1979	60	20	8.70	18.10	41.30
1980	60	20	9.60	23.00	41.40
1981	60[c,d]	20[d]	11.00	34.20	62.20
1982	75	20[e]	12.20	37.00	72.00
1983	75	20	12.20	41.80	80.00
1984	75	20	14.60	43.80	94.00
1985	75	20	15.50	46.50	89.90
1986	75	20	15.50	46.50	66.10
1987	75	20	17.90	53.70	88.10
1988	75	20	24.80	74.40	72.40
1989	75	20	31.90[f]	83.70	40.70
1990	75	20	28.60[g]	85.40	59.20
1991	100	20	29.90	95.30	82.10

Source: U.S. Department of Health and Human Services, Social Security Administration, *Social Security Bulletin Annual Statistical Supplement 1990* (Washington, DC: U.S. Government Printing Office, 1991).
[a]Beginning July 1973 for the disabled.
[b]Home health services not subject to coinsurance.
[c]Home health services not subject to deductible.
[d]Professional inpatient services of pathologists and radiologists are not subject to a deductible or coinsurance except when a physician accepts assignment.
[e]Effective October 1, 1982, professional inpatient services of pathologists and radiologists are subject to coinsurance.
[f]Includes the standard monthly SMI premium and a supplemental monthly flat premium under the Medicare Catastrophic Act of 1988. Amount shown is for Part B enrollees. Residents of Puerto Rico and other territories and commonwealths, as well as persons enrolled in Part B only, paid different supplemental flat premiums resulting in a smaller premium than that shown.
[g]The Omnibus Budget Reconciliation Act of 1989 revised the methodology for determining the 1990 SMI premium. Before the revision, the rate would have been $29.

uled to begin reimbursing physicians using a resource based relative value scale (RBRVS), an index of the resources necessary to provide a given medical service. The RBRVS is based on research performed at Harvard Medical School that examined the amount of physician time, level of training, degree of difficulty, and other overhead costs (including malpractice insurance) used to produce a given medical service. Each procedure is assigned a value that describes the relative amount of resources required to perform that

procedure compared to a base procedure. A procedure with the value of two requires twice as many resources as the base procedure. Reimbursement for a given procedure is determined by multiplying the RBRVS by a dollar conversion factor and adjusting for geographic differences in costs.

Like PPS for hospitals, RBRVS makes physician reimbursement prospectively determined. It removes incentives for physicians to charge higher fees one year in the hope of achieving higher reimbursement levels the next. Unlike PPS, the new physician reimbursement methodology does not bundle services. Physicians are still reimbursed on a piecemeal basis. The financial incentive to provide as many services as possible for each episode of care remains.

Partly as a result of this incentive, OBRA' 89 also introduced a volume performance standard (VPS). The VPS attempts to reduce the incentive to increase utilization by tying increases in physicians' reimbursement rates in one year to the volume of services provided in the previous year. If the volume in a given year increases above a predetermined amount, the budgeted increase in fees will be reduced in the following fiscal year. The effect of such a collective incentive on individual physician behavior is unclear.

The fee schedule determined by RBRVS generally increases fees for primary care physicians and decreases those for specialists such as surgeons and radiologists. Primary care physicians may be encouraged by these higher reimbursements to increase the number of Medicare beneficiaries they treat. They may also be encouraged to increase fees to other payers who are currently being charged less than the new Medicare reimbursable amount. On the other hand, reduced fees for specialists may encourage these physicians to decrease the number of Medicare beneficiaries they treat or increase the volume of services they perform.

OBRA '89 limits physicians' ability to balance bill. Before 1991, physicians had the option of assigning their bill to Medicare, accepting the Medicare allowable fee as payment in full (Medicare pays 80 percent of the allowable fee, the beneficiary 20 percent), or billing the patient for the difference between the physician's fee and the Medicare reimbursement. In the latter case, Medicare reduces its allowable fee by 5 percent and pays 80 percent of that reduced fee; the patient pays the remainder. Slightly more than 40 percent of physicians who have Medicare patients are participating, that is, they assign all of their Medicare claims. Nonparticipating physicians may also assign claims on a case-by-case basis.

Estimates of the actual number of claims assigned range from 60 percent to 80 percent, although Medicare beneficiaries with private health insurance are less likely to have their claims assigned. One of the advantages to physicians of assigning claims is lower billing costs, since the Medicare reimbursement on assigned claims is paid directly to the physician rather than through the beneficiary. The reduction in the extra return from balance billing may lead more physicians to assign claims, reducing costs to employer plans.

OBRA '89 prohibits physicians from charging more than 125 percent of the Medicare allowable fee to Medicare patients in 1991, 120 percent in 1992, and 115 percent in 1993. The effect of these limitations on employer retiree health costs depends on the rate at which physicians assign claims, the method employers use to integrate their plans with Medicare, and the resulting change in Medicare patients' utilization of health care services. If the restrictions on balance billing lead physicians to assign more claims, out-of-pocket costs to Medicare beneficiaries and the costs to supplemental private insurance plans may fall.

◆ Supplemental Coverage

Health care expenditures as a proportion of elderly income rose from 8.9 percent in 1972 to 12.1 percent in 1988 (U.S. Department of Health and Human Services, 1991b). The majority of Medicare beneficiaries do not rely solely on Medicare for health insurance coverage. They can purchase supplemental Medigap

insurance, rely on employer-sponsored health plans, or—for the poorest elderly—gain Medicaid coverage. In 1988, 20.5 percent of retirees aged 65 and over were covered by an employer-sponsored retiree health plan and 4.5 percent qualified for retiree health coverage through a spouse's plan (Davis, 1991). In 1987, about 20 percent of retirees who lacked employer-sponsored retiree health insurance had Medicaid coverage (Monheit and Schur, 1989). The prevalence and characteristics of these supplemental plans directly affect the health care costs paid by employers, Medicare beneficiaries, and taxpayers.

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Roughly one-quarter of retired Medicare-eligible individuals have additional health insurance coverage through their, or their spouses', former employers.

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Medigap plans generally cover part or all of the Medicare deductibles and coinsurance rates. These plans thus reduce the "up-front" expenses for Medicare beneficiaries. Many Medigap policies also offer catastrophic coverage that provides coverage after Medicare's benefits are exhausted. A variety of Medigap plans with widely different benefits are available to Medicare beneficiaries. **In response to complaints that the wide variety of Medigap plans prevented beneficiaries from comparison shopping and resulted in under- or overinsurance, OBRA '90 mandated that state insurance regulators develop a standardized set of policies.** The National Association of Insurance Commissioners has tentatively approved a list of 10 plans. Each of the plans provides a core set of benefits that would cover the 20 percent coinsurance payment for physician fees, the hospital costs for patients with stays longer than 61 days, and an additional 365 days of coverage. More comprehensive and expensive plans may extend coverage to the hospital deductible, Part B deductible, prescription drugs, or preventive care.

Employer-Sponsored Retiree Health Plans

Roughly one-quarter of retired Medicare-eligible individuals have additional health insurance coverage through their, or their spouses', former employers. Some employers offer their retirees supplemental plans that are essentially Medigap plans. Most employer-sponsored retiree health plans provide the same benefits in retirement that the employees received while working. When the retiree becomes eligible for Medicare, the employer-sponsored plan becomes the secondary payer and integrates its benefits with Medicare to avoid double payment of benefits. There are three general integration methods: carve out, exclusion, and coordination of benefits (COB). An employer-sponsored plan that uses a carve-out method calculates the amount it would have paid in the absence of Medicare, subtracts the actual Medicare payment from its payment, and pays the remainder. Under the exclusion method, the Medicare payment is first subtracted from the total charge, and then the employer-sponsored plan's payments are calculated on the remainder. Under the COB method, the private plan pays the difference between the Medicare payment and the total charge as long as that difference is less than the total amount the private plan would have paid in the absence of Medicare. The number of employers offering COB plans is declining largely because of growing costs. In 1988, 33 percent of employers reported offering a COB plan, compared with 28 percent in 1989 (A. Foster Higgins, Inc., 1990).

The following table provides an example of these three integration methods assuming a $100 Medicare allowable charge, a $10 private plan deductible, and a 20 percent private plan coinsurance rate. The example also assumes the physician assigns the charge. Under the carve-out method, the employer-sponsored plan would pay $72 in the absence of Medicare (80 percent of $90). Since Medicare pays 80 percent of the allowable charge, its payment is $80, which is greater than

the private plan's payment. The private plan thus pays nothing, and the patient pays a $20 Medicare coinsurance amount. Under the exclusion method, the private plan calculates its benefits on the $20 Medicare copayment. Subtracting the deductible and taking 80 percent of the remainder, the plan pays $8 and the patient pays $12. Under COB, the private plan pays the entire Medicare copayment ($20), because that is less than its payment would have been in the absence of Medicare.

Integration Method	Medicare Pays:	Private Plan Pays:	Patient Pays:
Carve Out	$80	$ 0	$20
Exclusion	80	8	12
COB	80	20	0

Assuming the changes in physician reimbursement under Medicare mandated by OBRA '89 do not lead to a change in utilization rates, plans using a carve-out approach are likely to be the least affected, while plans using a COB method are likely to experience the most savings. A majority of employers integrate their retiree health plans with Medicare using the carve-out method, and that majority appears to be growing.

Because private employers are faced with increasing health care costs and a new ruling by the Financial Accounting Standards Board that requires listing the present value of retiree health benefits as a liability (FAS 106), many are reevaluating their plans and considering limiting or eliminating them (Davis, 1991).

Effects of Supplemental Plans

Medicare supplemental plans, whether employer provided or individually purchased, affect Medicare costs and efforts to reform the health care delivery system. The Medicare program has rather large deductibles and coinsurance provisions, as well as limited coverage, at least compared with private health insurance plans. The availability of supplemental plans mitigates the effect of these provisions. The political process that led to the passage and repeal of the Medicare Catastrophic Coverage Act of 1988 illustrates this point. This act expanded Medicare coverage to benefits not currently offered and reduced the hospital deductible, but it funded the benefits through increased premiums and taxes borne by Medicare beneficiaries. Since most beneficiaries already had supplemental coverage, many felt the act forced them to pay twice for the same coverage. The act was repealed in part because of opposition from the segment of the Medicare population who had supplemental coverage.

Supplemental coverage also reduces the costs of health care services to Medicare beneficiaries. Since this coverage often pays a portion or all of their deductibles and coinsurance, Medicare beneficiaries have less of an incentive to limit their purchases of health care services. Moreover, supplemental coverage often pays at least some of the difference between the provider's actual charges and the amount Medicare reimburses. This means many physicians have continued to treat Medicare patients in spite of increasingly below-market reimbursement rates. Thus supplemental coverage enables Medicare beneficiaries to demand and receive more care from more physicians than would occur if Medicare were their only source of coverage.

◆ Conclusion

The Medicare program is the largest single purchaser of health care services in the United States. The rising costs of health care are placing a number of strains on the Medicare program and on the income security of its largest group of beneficiaries: the elderly. Part A, which is funded through a payroll tax, faces insolvency relatively soon unless costs are controlled, or more likely, tax rates are increased. Part B, which receives most of its revenue from general revenues, is exacerbating the federal budget deficit. Recent proposals for controlling Medicare expenditures have focused on reducing reimbursements to providers, although proposals to increase the share of Medicare expenditures borne by beneficiaries have been advanced and

are likely to remain under consideration as a budget-cutting strategy.

Increasing health care costs, coupled with FAS 106, are leading employers to consider reductions in the health benefits they provide to retirees.

Changes in Medicare provider reimbursement may affect other purchasers of health care services. Changes in hospital reimbursement have led to more outpatient care and aided the development of technologies that allow care to be moved out of the hospital. They have also led to shorter lengths of stay and increased the intensity of hospital services. PPS also had the unintended effect of increasing the number of separate psychiatric units in hospitals. Initially, PPS may have saved private payers money by providing many hospitals with net profits from Medicare programs. More recently, the slow growth of PPS reimbursement rates may have created a situation in which private payers subsidize Medicare patients.

The recently enacted changes in physician reimbursement are likely to create even greater changes in the physician services market than PPS did in the hospital services market. RBRVS not only makes the physician fee schedule prospective, it also increases fees for services generally performed by medical specialists and lowers fees for services generally performed by surgical specialists. While employers are concerned that medical specialists will increase the fees they charge other payers to match Medicare reimbursement, it seems likely that in the long run the federal budget deficit will limit the growth of Medicare reimbursement to physicians.

Changes in physician reimbursement under Medicare and restrictions on balance billing are likely to have important implications for the elderly. While employer-sponsored retiree plans, which bear the burden of balance billing for their enrollees, will experience lower costs, these developments may lead providers to begin to turn away more Medicare patients. The combination of increasing health care costs, Medicare program changes, and employer plan redesign could potentially lead to increases in the elderly's out-of-pocket expenditures and reductions in their access to care. Given the elderly's importance as a political constituency, it seems unlikely that any limitation on their access to providers would continue for long. More likely, Medicare problems may act as a catalyst for reform not merely of the Medicare program but of the entire health care delivery system.

The future of Medicare is likely to be an important political issue in the coming years. Despite employers' concern about the continued provision of retiree health benefits, many employees expect these benefits when they retire. Among nonretired persons between the ages of 18 and 65, 59 percent say they expect to receive retiree health benefits through their employer, according to a recent poll (Employee Benefit Research Institute/The Gallup Organization, 1991). Conversely, 71 percent of these individuals felt Medicare will provide a lower level of benefits when they retire. These expectations, combined with the changes occurring or expected to occur in the private and public provision of health benefits for older Americans, may produce a politically volatile situation.

This *Issue Brief* was written by Michael Anzick of EBRI with assistance from the Institute's research and education staffs.

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